

CLAIMS

1. A contents distribution system for transmitting and receiving contents and additional information in accordance with a communication protocol in which one or more pieces of the additional information corresponding to an internal attribute of said contents are appended to said contents and said contents and said additional information are packetized as a data part without distinction, said system comprising:

a contents server having storage means of holding one or more contents, contents data acquisition means of receiving a data request including request range information of contents out of consideration for the additional information, specifying a requested range, and extracting data of contents in said requested range from said storage means, and transmitting means of transmitting the extracted data of said contents with said additional information appended; and

a contents receiving apparatus having receiving means of receiving the data of said contents and said additional information that are transmitted from said transmitting means, received data decision means of deciding a receiving request range of said contents out of consideration for said additional information, and

data request transmitting means of transmitting said data request including said decided receiving request range as said request range information;

wherein said contents data acquisition means specifies said requested range according to said data request transmitted by said data request transmitting means.

2. A contents server for a contents distribution system for transmitting and receiving contents and additional information in accordance with a communication protocol in which one or more pieces of the additional information corresponding to an internal attribute of said contents are appended to said contents and said contents and said additional information are packetized as a data part without distinction, said contents server comprising:

storage means of holding one or more contents, contents data acquisition means of receiving a data request including request range information of contents out of consideration for the additional information, specifying a requested range, and extracting the data of contents in said requested range from said storage means, and transmitting means of transmitting the extracted data of said contents with said additional information appended.

3. The contents server according to claim 2, wherein said communication protocol is an HTTP, and said data request is provided with an extension header for writing said request range information of said contents out of consideration for said additional information.
4. The contents server according to claim 2, wherein said contents are AV contents including any one of or any combination of video, image and audio.
5. The contents server according to claim 2, wherein said additional information includes information concerning a state of copyright protection of said contents.
6. The contents server according to claim 2, wherein in the case that said contents are encrypted, said additional information includes information for decoding said encrypted contents.
7. A contents receiving apparatus in a contents distribution system for transmitting and receiving contents and additional information in accordance with a communication protocol in which one or more pieces of the additional information corresponding to an internal attribute of said contents are appended to said contents and said contents and said additional information are packetized as a data part without distinction, said apparatus comprising:

received data decision means of deciding a receiving request range of contents out of consideration for the additional information, data request transmitting means of transmitting a data request including request range information indicating said decided receiving request range, and receiving means of receiving the data of said contents and said additional information.

8. The contents receiving apparatus according to claim 7, wherein said receiving means stores only the data of said contents in a reception buffer according to the received data of said contents and said additional information.

9. The contents receiving apparatus according to claim 7, wherein said communication protocol is an HTTP, and said data request is provided with an extension header for writing said request range information of said contents out of consideration for said additional information.

10. The contents receiving apparatus according to claim 7, wherein said contents are AV contents including any one of or any combination of video, image and audio.

11. The contents receiving apparatus according to claim 7 or 10, wherein said additional information includes information concerning a state of copyright protection of said contents.

12. The contents receiving apparatus according to claim 7 or 10, wherein in the case that said contents are encrypted, said additional information includes information for decoding said encrypted contents.
13. A contents distribution method of transmitting and receiving contents, employing a contents server in which one or more pieces of contents are stored, and a contents receiving apparatus receiving said contents from said contents server via a network;
 - said contents server comprising a step of receiving a data request including request range information of contents out of consideration for additional information, specifying a requested range, and extracting data of contents in said requested range out of storage means, and a step of transmitting the extracted data of said contents with said additional information appended; and
 - said contents receiving apparatus having a step of deciding a receiving request range of said contents out of consideration for said additional information, a step of transmitting said data request including said decided receiving request range as said request range information, and a step of receiving the data of said data of contents and said additional information that are transmitted from said transmitting means.

14. A program for the contents distribution system according to claim 1, wherein said program enables a computer to implement, for said contents server, storage means of holding one or more contents, contents data acquisition means of receiving said data request including said request range information of said contents out of consideration for said additional information, specifying a requested range, and extracting said data of contents in said requested range out of said storage means, and transmitting means of transmitting the extracted data of said contents with said additional information appended, and to implement, for said contents receiving apparatus, receiving means of receiving the data of said contents and said additional information that are transmitted from said transmitting means, received data decision means of deciding a receiving request range of said contents out of consideration for said additional information, and data request transmitting means of transmitting said data request including said decided receiving request range as said request range information.

15. A program for the contents server according to claim 2, wherein said program enables a computer to implement, for said contents server, storage means of holding one or more contents, contents data acquisition means of

receiving said data request including said request range information of said contents out of consideration for said additional information, specifying a requested range, and extracting said data of contents in said requested range out of said storage means, and transmitting means of transmitting the extracted data of said contents with said additional information appended.

16. A program for the contents receiving apparatus according to claim 7, wherein said program enables a computer to implement, for said contents receiving apparatus, received data decision means of deciding said receiving request range of contents out of consideration for said additional information, data request transmitting means of transmitting said data request including said request range information indicating said decided receiving request range, and receiving means of receiving data of said contents and said additional information.

17. A storage media storing the program according to any of claims 14 to 16, wherein said storage media is usable on the computer.